

Spotlight on...

Judit Ovádi

Editor of *FEBS Letters* since 2000



Judit Ovádi's enthusiasm for her work and her zest for life is exemplified by her red hair. She began her scientific career with an undergraduate degree from Eötvös University and obtained her graduate degree from the Hungarian Academy of Sciences, both in Budapest. She also raised two children while managing her full-time career. "I have never felt a need to choose between family and science; my philosophy is: if you like doing something, you can always find the way and the time to do it." Judit is currently a full professor at the Hungarian Academy of Sciences. She edits papers for *FEBS Letters* in the fields of enzymology, protein-protein interactions and metabolic control.

What obstacles did you face in becoming an academic scientist?

University studies were initially denied to me under the communist system because of my family background. But I persevered and I was able to enter university through an indirect route, after spending two years as a laboratory technician, first in a pharmaceutical factory and then at the university. It was there that I met such wonderful scientists and decided that I wanted to become a scientist too. And now you can see my career has spanned already almost thirty years.

What research does your lab do?

My research focuses on the relationship between protein organization and function in both normal and disease states. We look at how protein structures and ultrastructures contribute to cellular organization using purified proteins, human cell extract, human transfected cells lines and tissues. We research three areas within our theme, firstly enzymatic association (microcompartmentalization) as a way to control metabolism [1], secondly microtubular systems as potential targets of drugs and proteins, for instance we discovered an anti-cancer drug which does not have the side effects of current cancer therapy drugs [2] and we also identified TPPP/p25, an intrinsically unstructured protein that induces microtubule assembly and is enriched in the inclusion bodies in the brain tissue of people with Parkinson's disease [3,4]. Our third area deals with the molecular mechanism that initiates the neurodegeneration, including enzyme deficiency.

What is the structure of an unstructured protein?

Unstructured proteins are not completely unstructured, they are just highly flexible. Frequently the structure of such dynamic proteins are stabilized by binding to their targets.

What is your most cited paper?

My most cited one is an early work from my undergraduate thesis; it became a citation classic even though it was published in a Hungarian journal [5]. It describes the specific modification of histidine residues by diethylpyrocarbonate. Site mutagenesis was a very hot topic at the time.

Do you have a favourite paper?

Instead of a favourite paper, I would like to mention Paul Srere, a wonderful friend who had perhaps the most influence on my scientific career. He was the originator of many fundamental concepts in sub-cellular architecture, for instance he coined the term "metabolon" to describe the functional complex of enzymes in a metabolic sequence. We collaborated and also co-authored several review articles, including a well-cited one in *FEBS Letters* [6].

What is your favourite non-scientific pastime?

I like spending time with my husband, both at home and going to the theatre and concerts. I enjoy family get-togethers on weekends and we also go skiing in the winter and to the sea in summer.

What do your students say about you?

My students might say that I always ask them what they have been doing (laughing). The atmosphere in our lab is very good and our cooperation is reflected in our publications. We have daily discussions; for me this is the best part of my work.

What does success mean to you?

Of course, the real success as a scientist is to identify an important question and justify a hypothesis with data, and to attract the interest of other scientists, which is reflected by citations, speaking invitations and collaborations. But I cannot fail to mention that the success of my students is also very important for me, several students have graduated from my lab and some have chosen to remain in my lab as senior scientists. I am very fortunate!

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Interview by Tine Walma